FIG. 1A

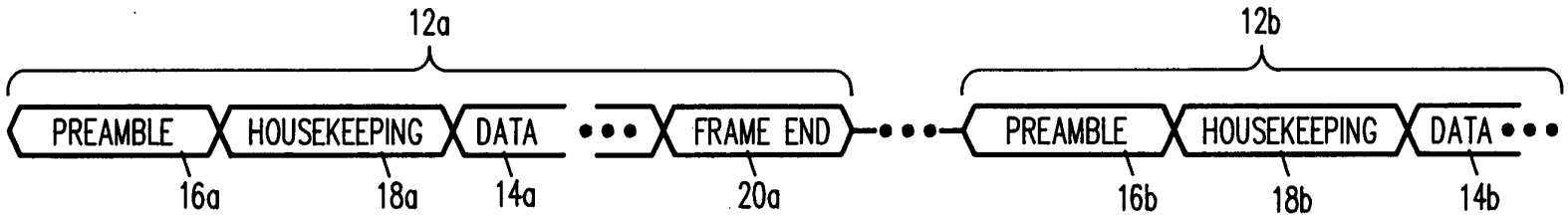


FIG. 1B

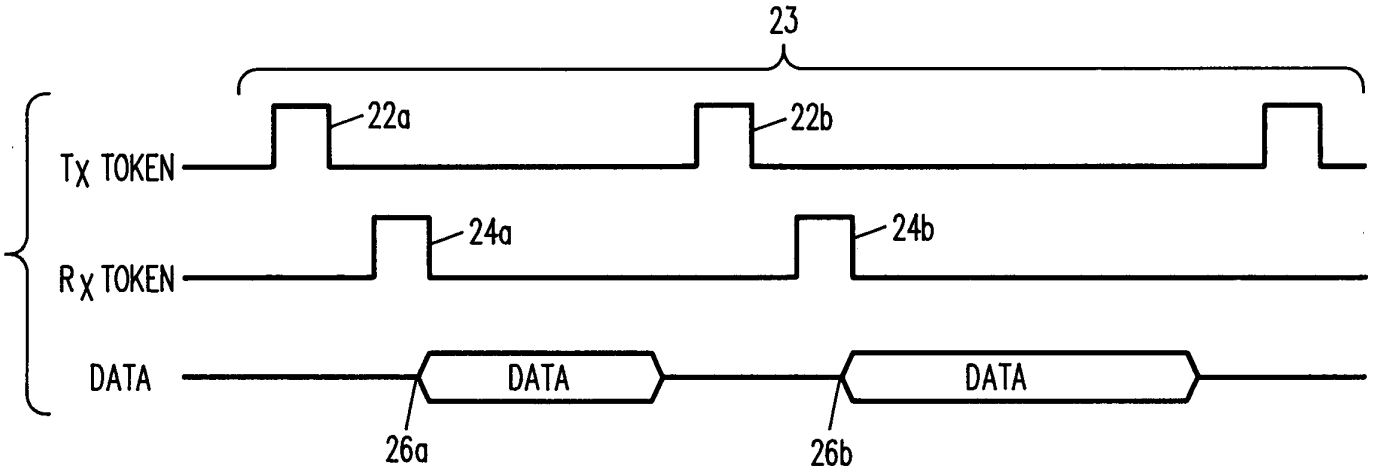
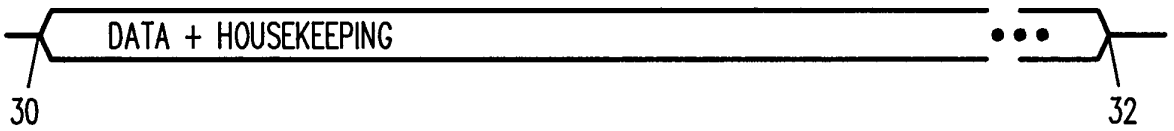


FIG. 1C



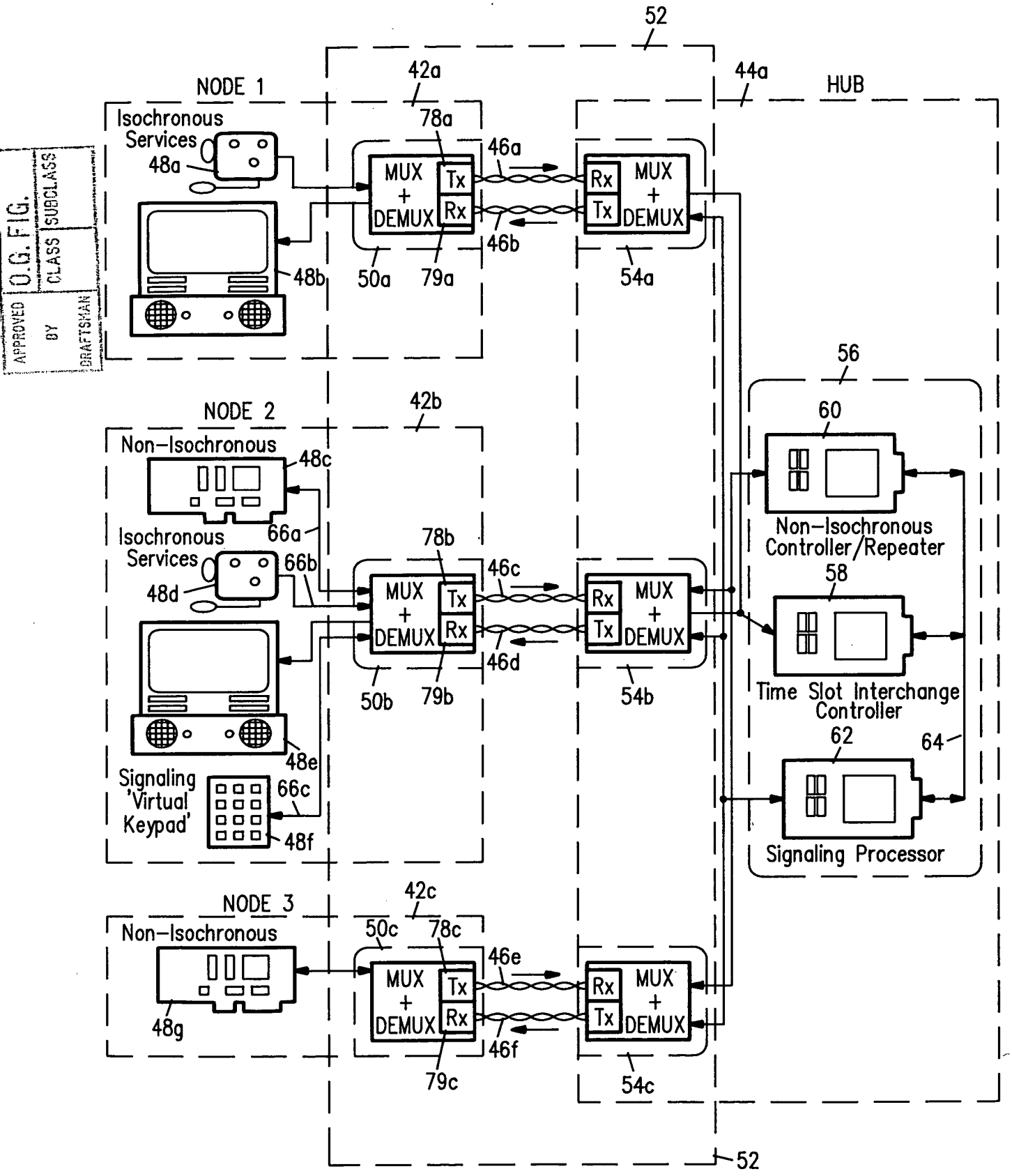

52
NODE 1
42a
44a
HUB
Isochronous Services
48a
78a
MUX + DEMUX
Tx
Rx
46a
46b
48b
50a
79a
54a
56
NODE 2
42b
60
Non-Isochronous
48c
Non-Isochronous Controller/Repeater
66a
Isochronous Services
66b
78b
46c
58
48d
46d
50b
79b
54b
Time Slot Interchange Controller
62
64
48e
Signaling 'Virtual Keypad'
66c
48f
Signaling Processor
NODE 3
42c
Non-Isochronous
50c
78c
46e
48g
46f
79c
54c
52

FIG. 2

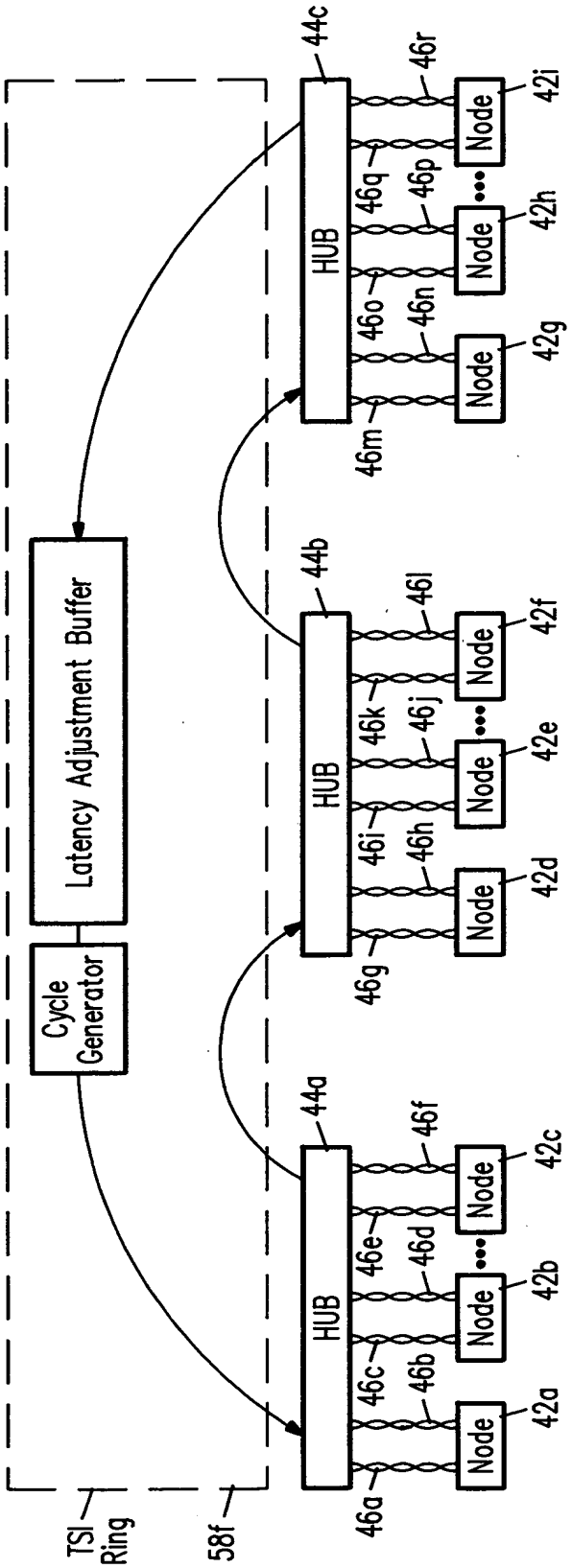


FIG. 3A

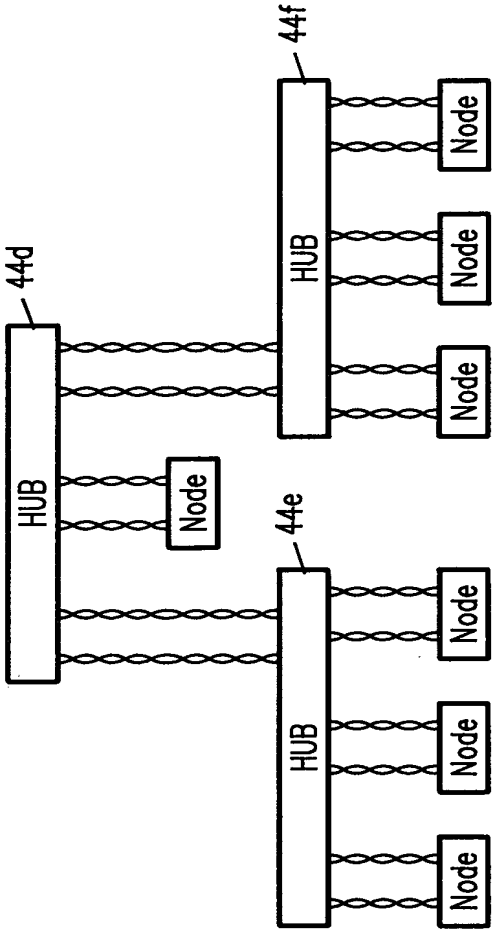


FIG. 3B

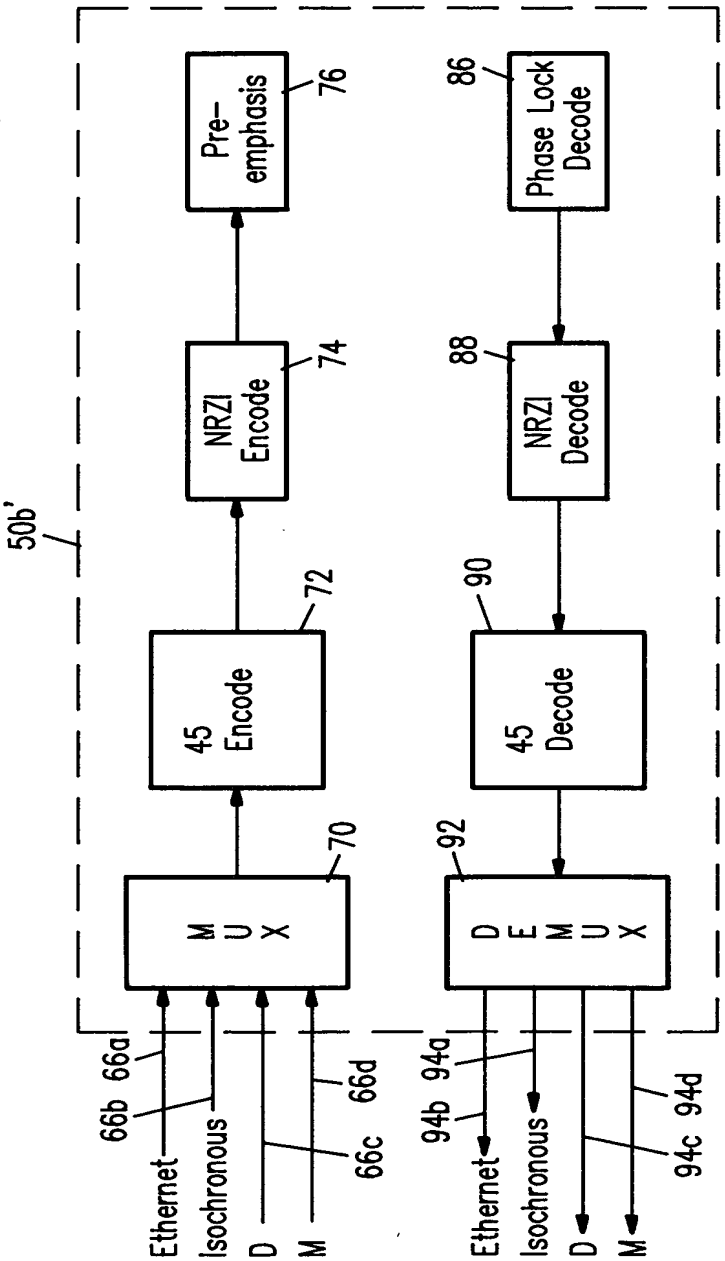


FIG. 4

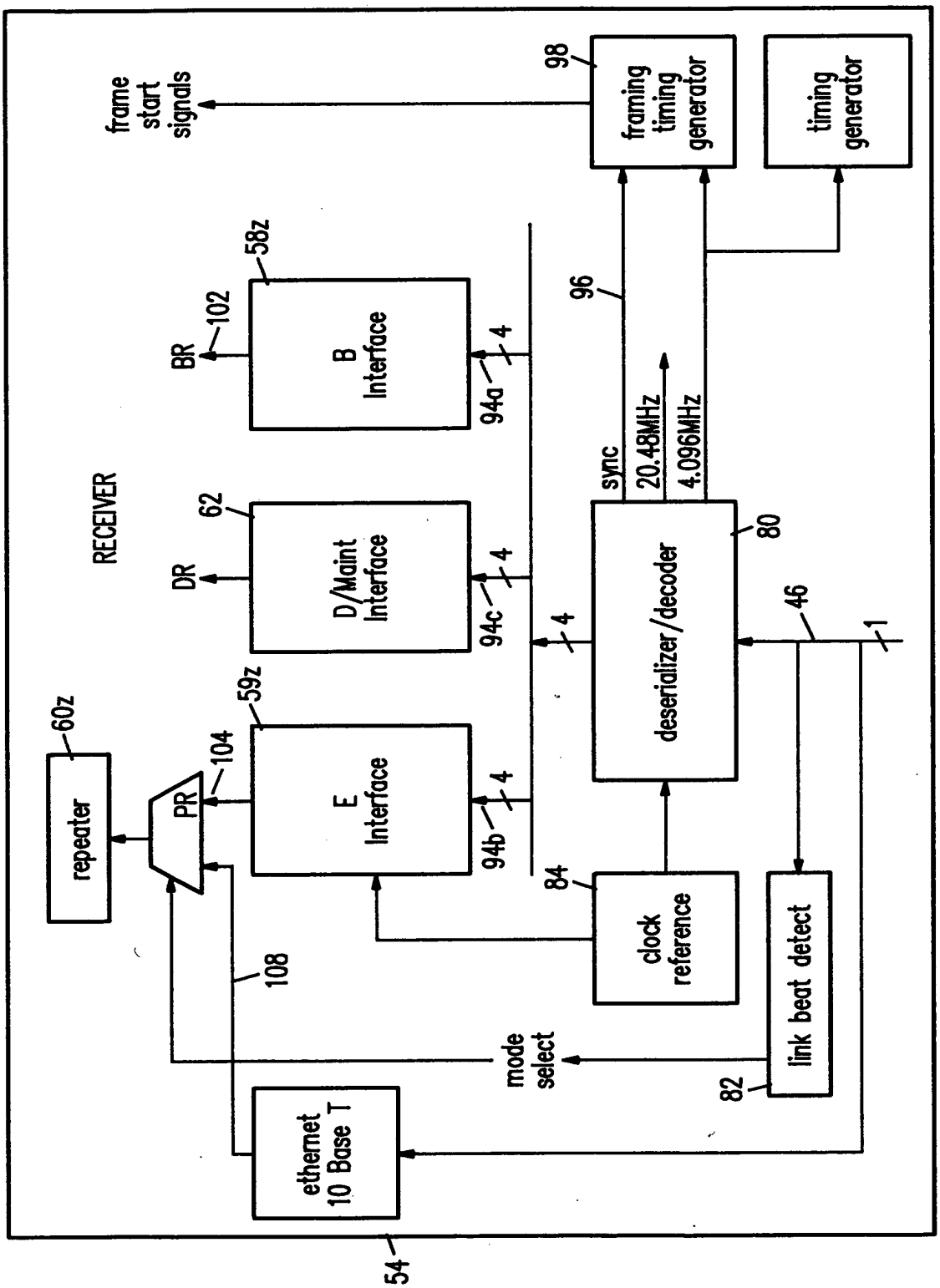


FIG. 5

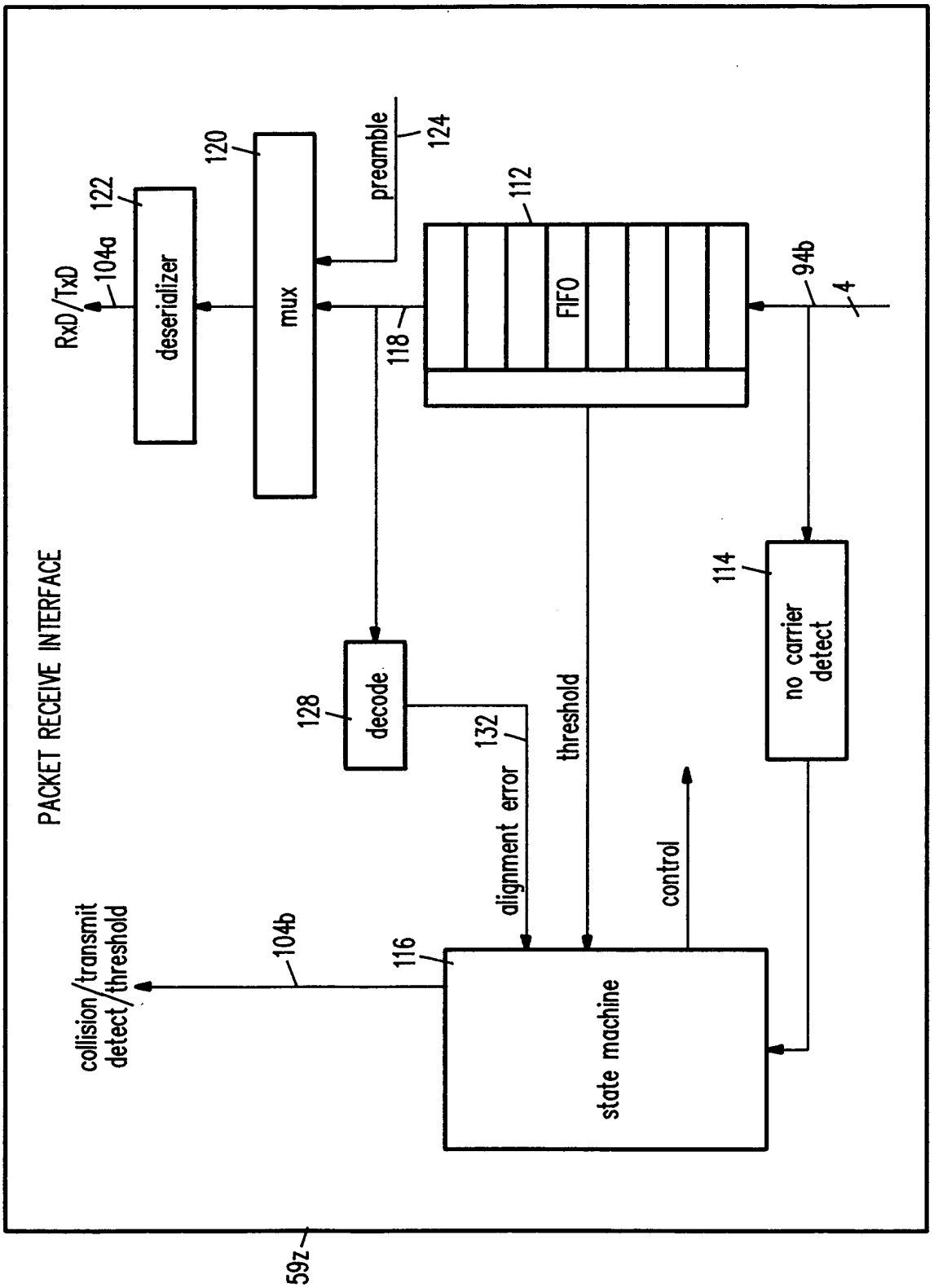


FIG. 6

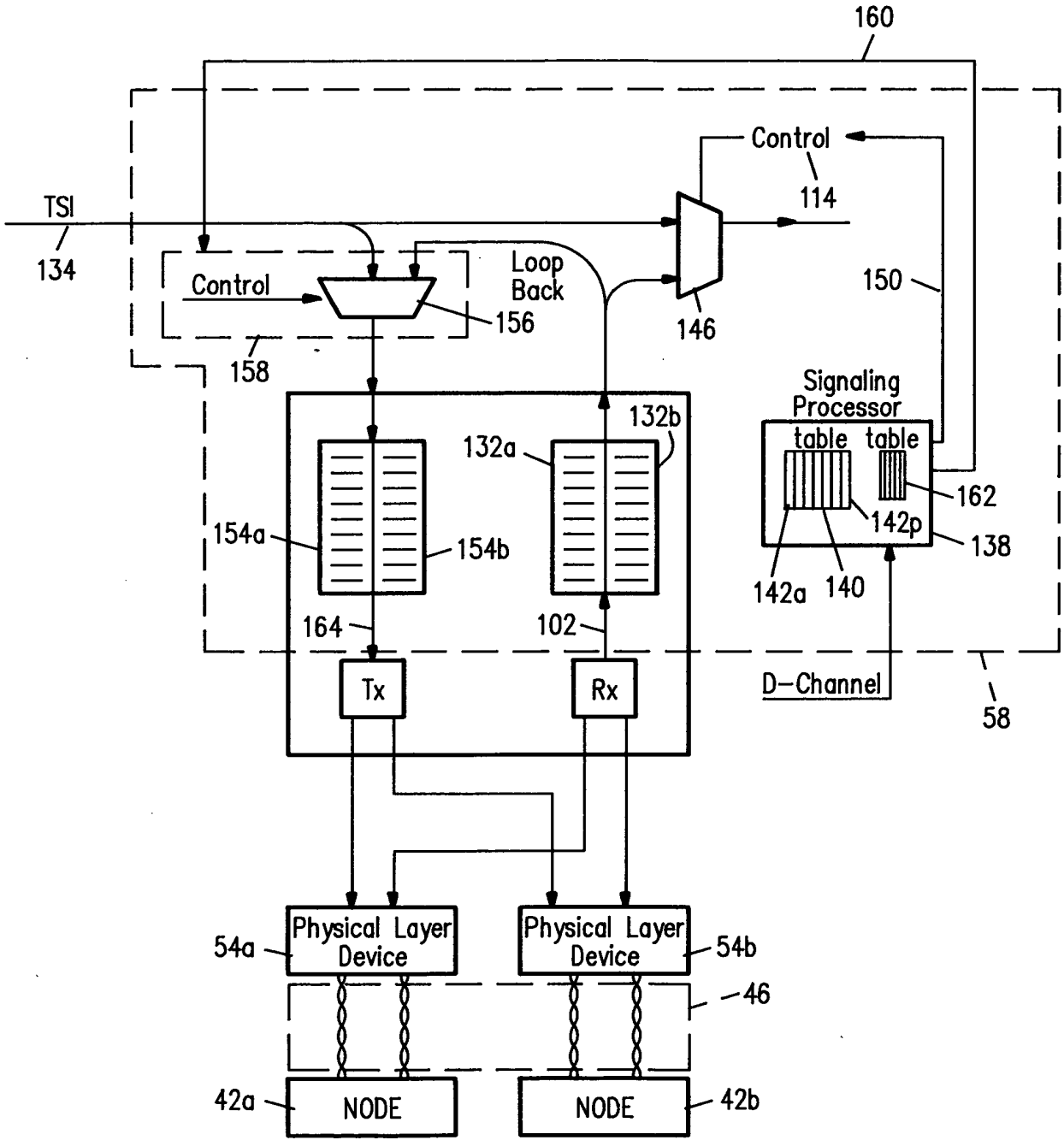


FIG. 7

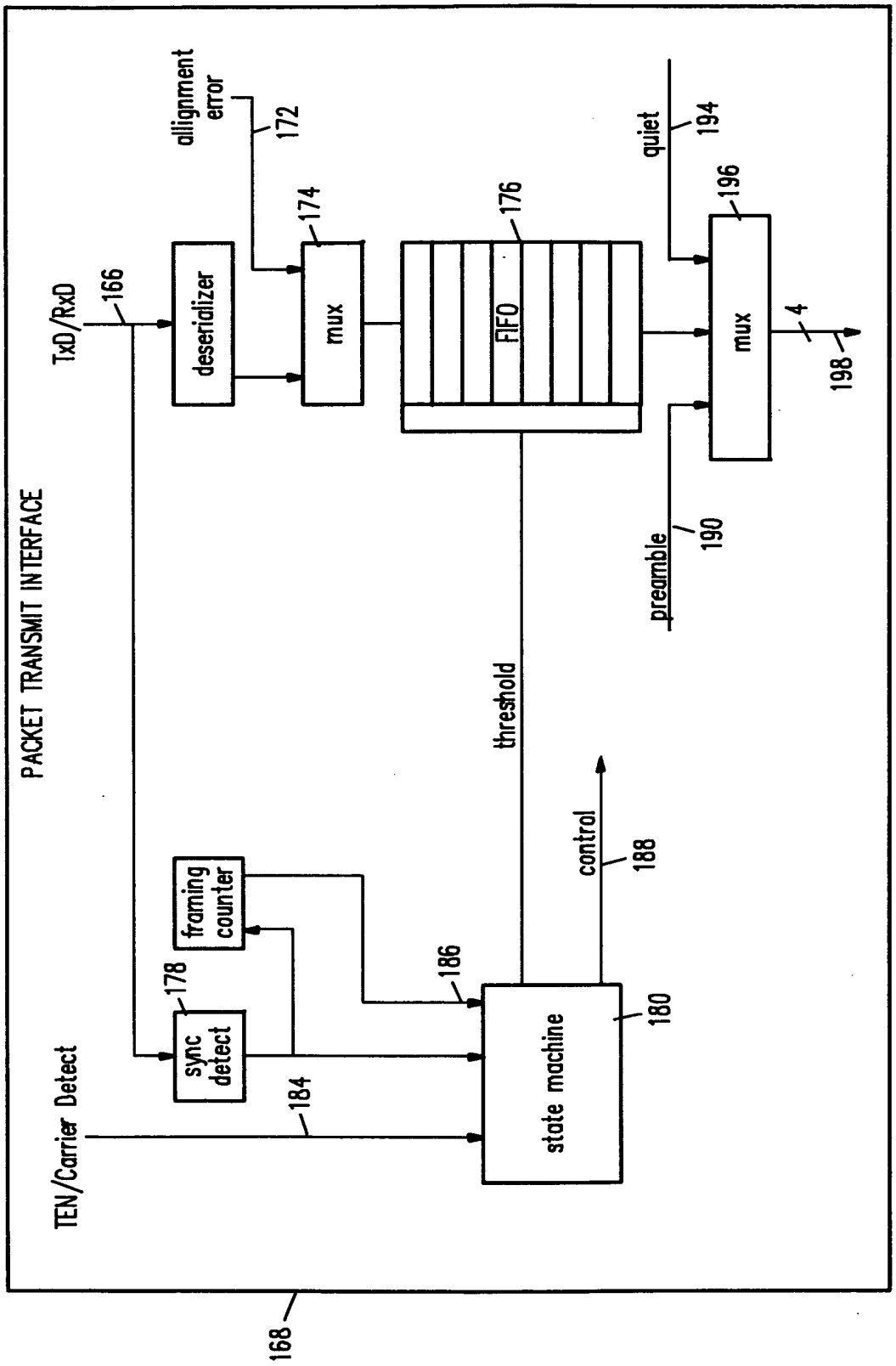


FIG. 8

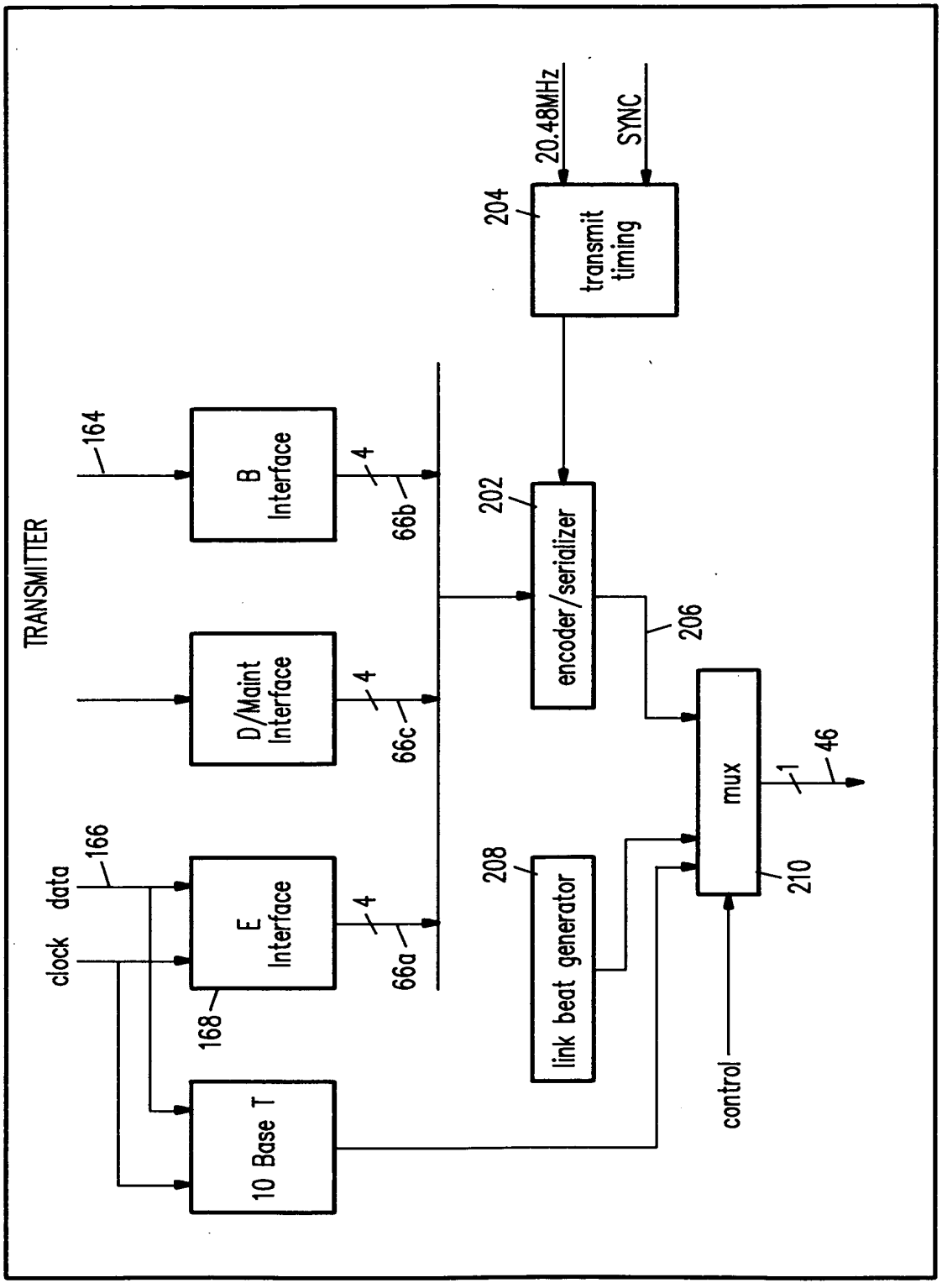


FIG. 9

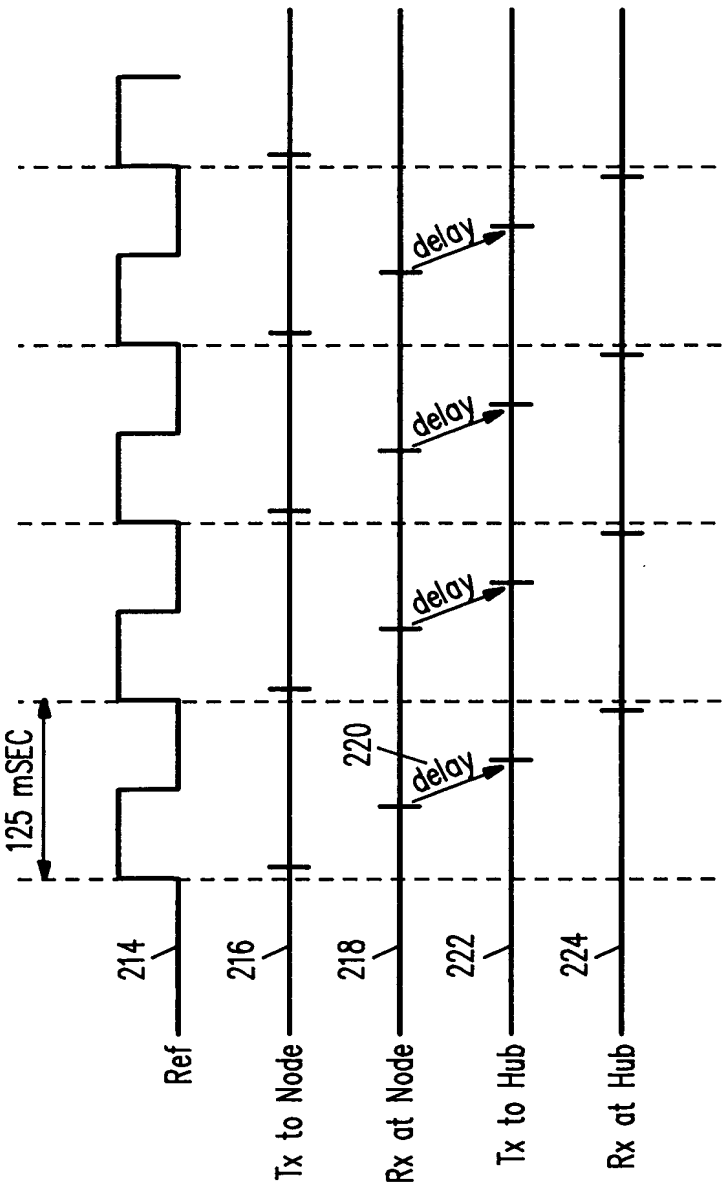


FIG. 10

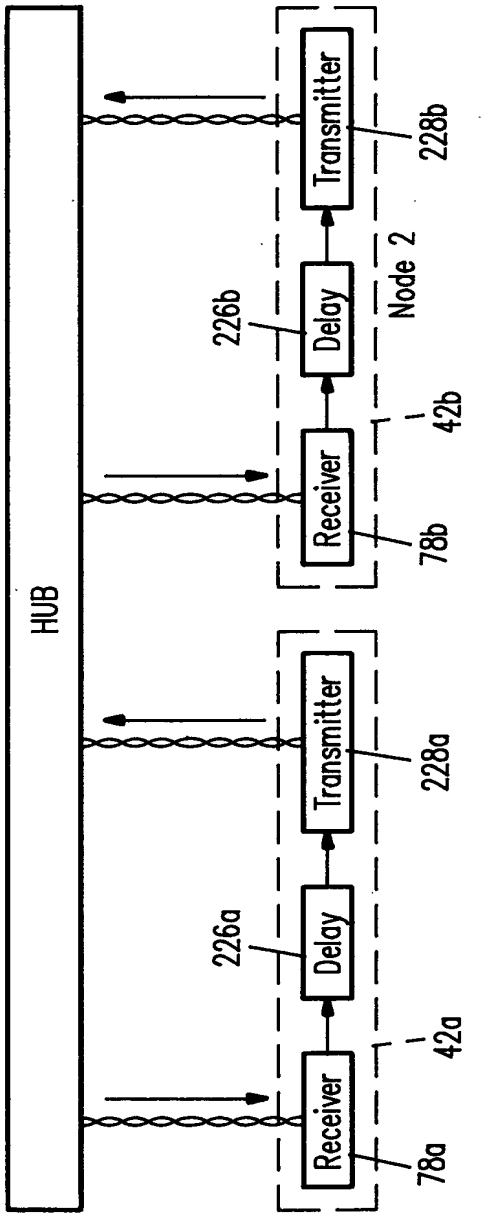


FIG. 11

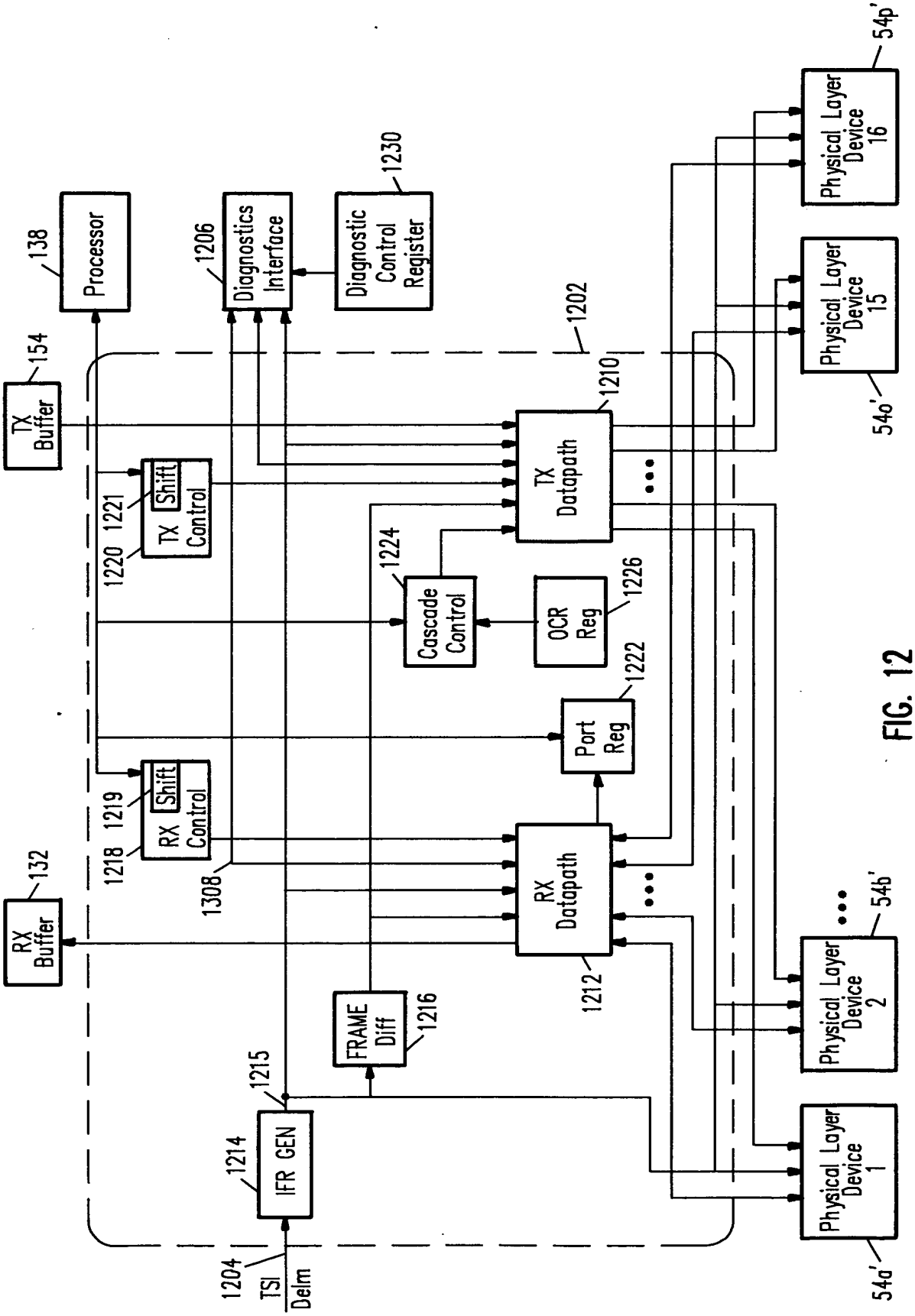


FIG. 12

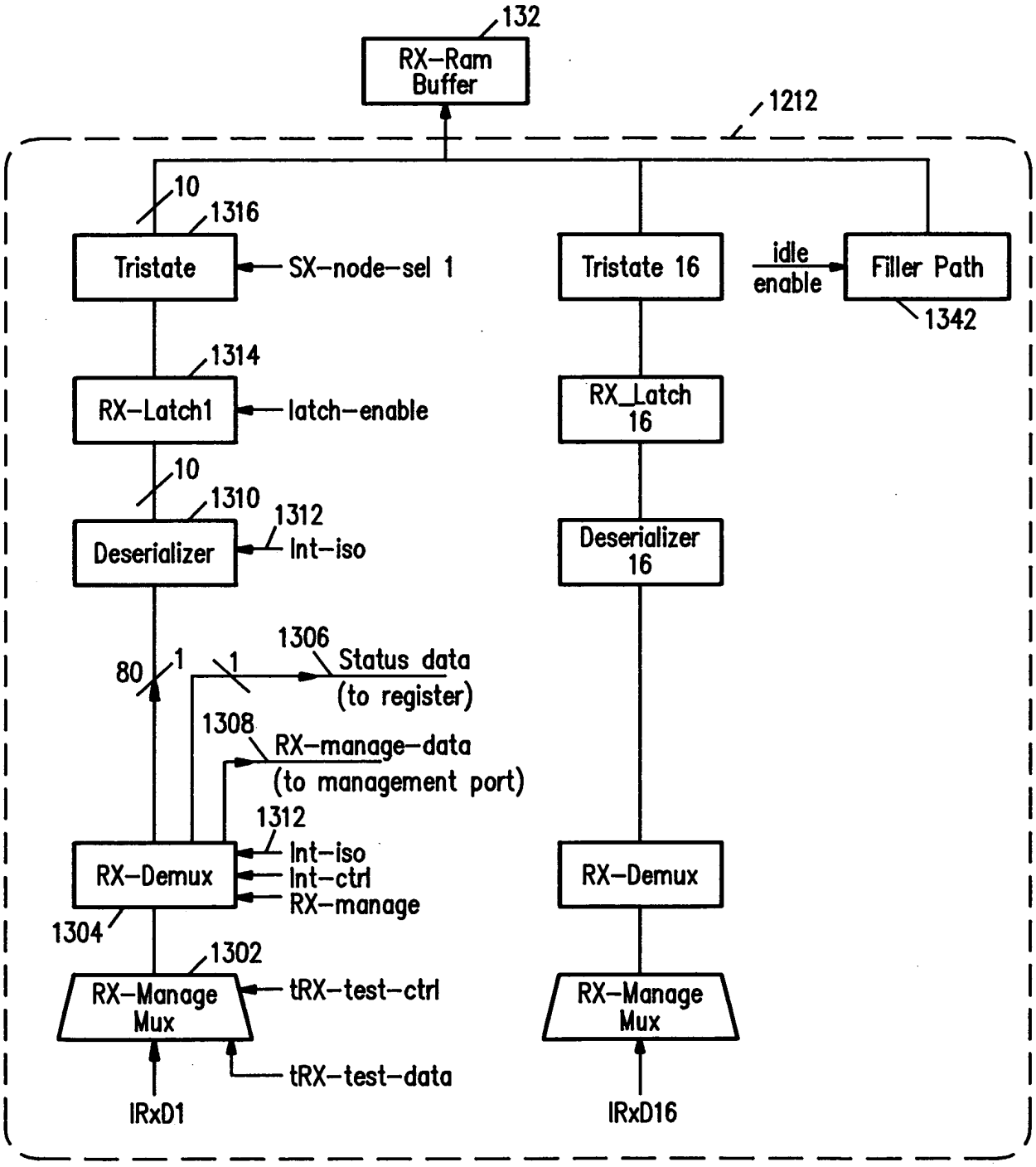


FIG. 13

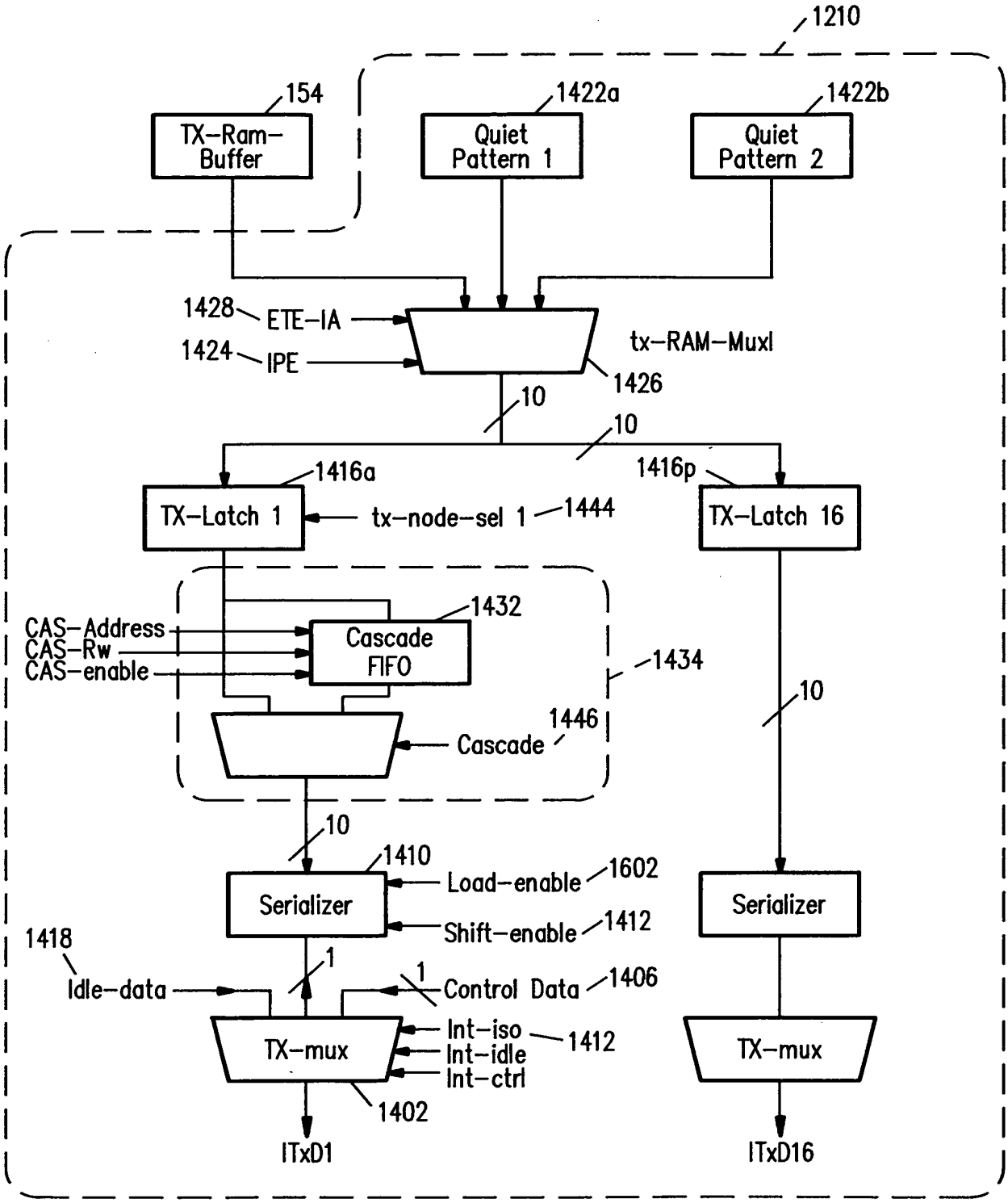
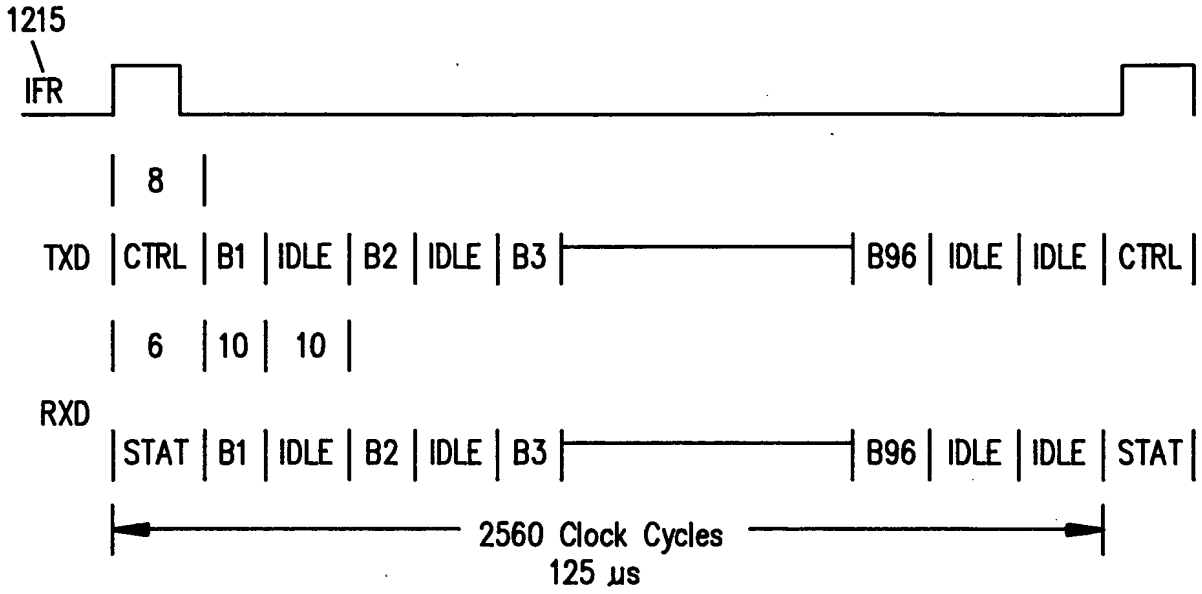


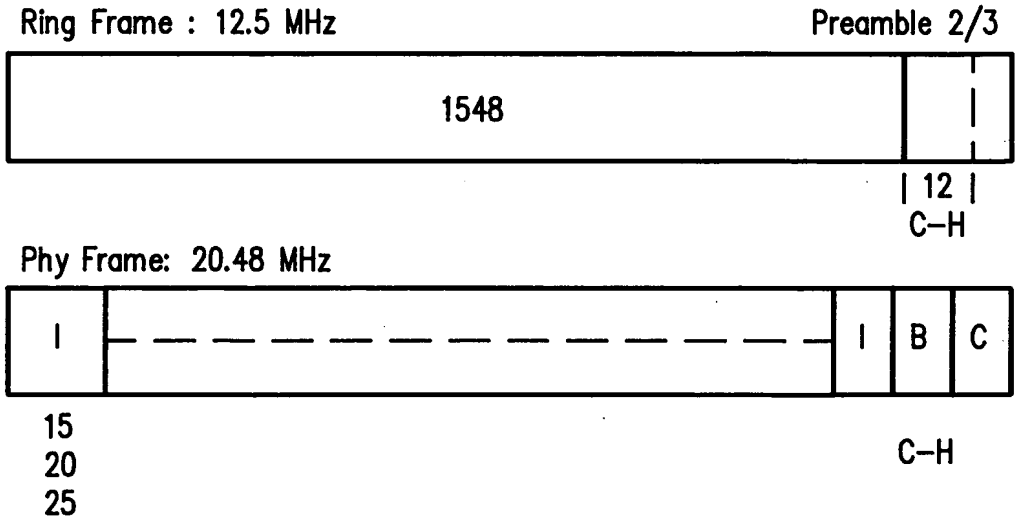
FIG. 14



TXD: Data sent from Isochronous Data Exchanger to Physical Layer Portion.
RXD: Data Received by Isochronous Data Exchanger from Physical Layer Portion.
IFR: Isochronous Frame Sync signal sent from Isochronous Data Exchanger to Physical Layer Portion.
CTRL: Control data sent from Isochronous Data Exchanger to Physical Layer Portion.
STAT: Status data sent from Physical Layer Portion to Isochronous Data Exchanger.
B(1:96): B channel data (96 bytes of Bchannel data per µs cycle).
IDLE: Filler data.

FIG. 15A

FIG. 15B



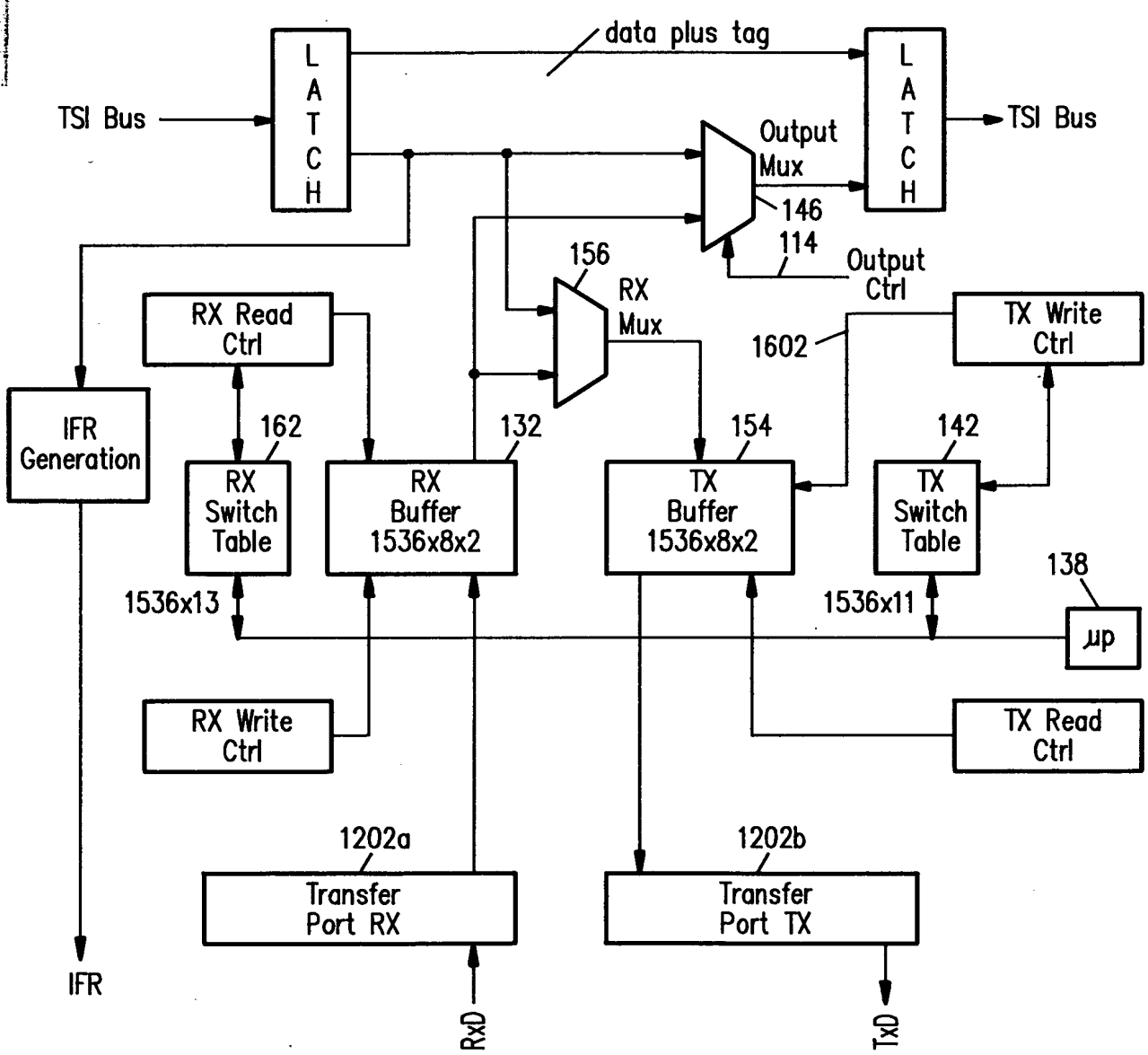
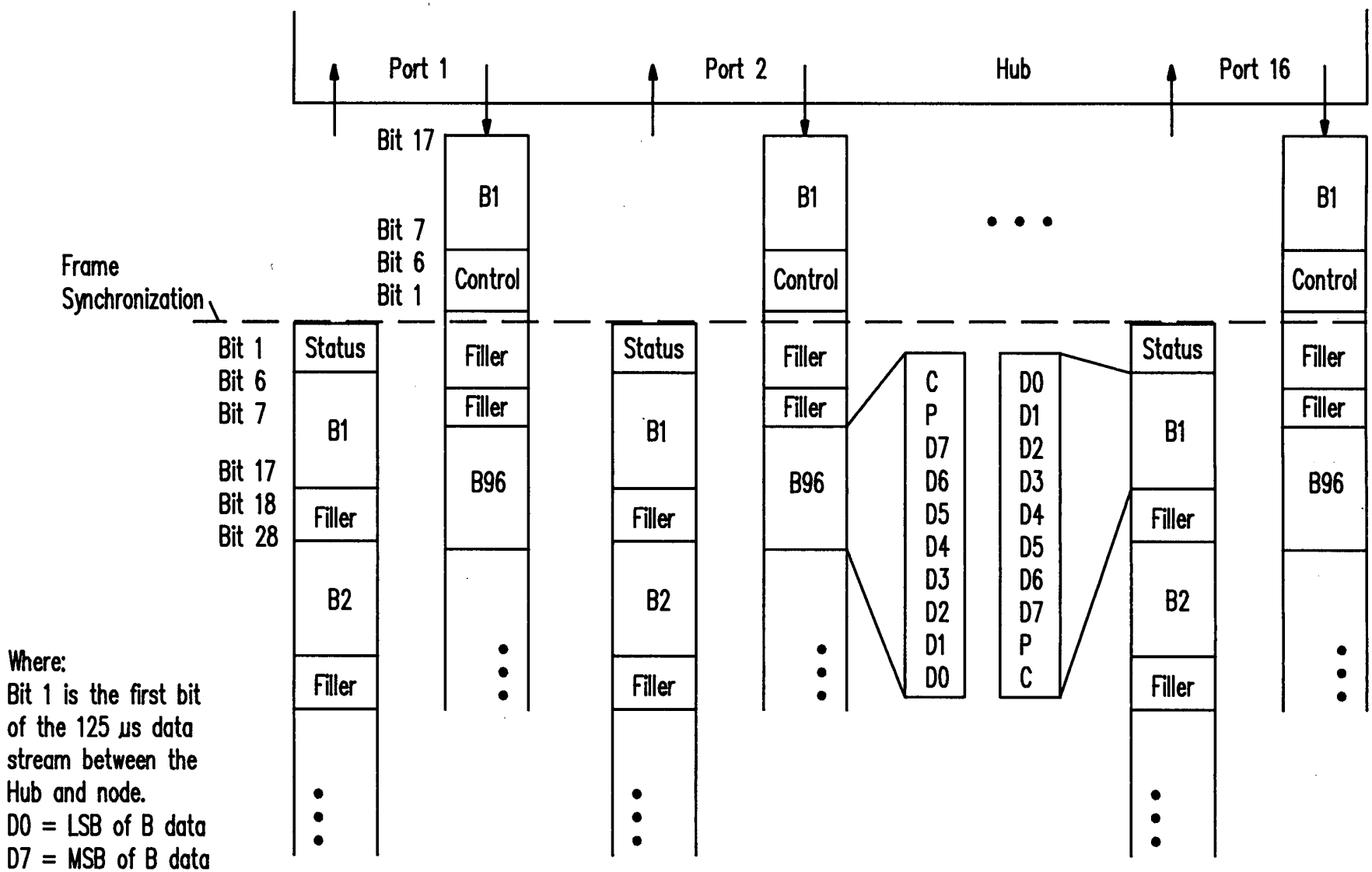
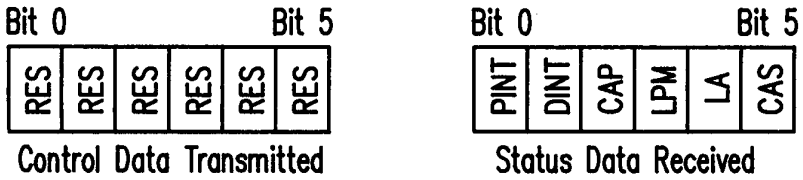


FIG. 16



Where:
Bit 1 is the first bit of the 125 µs data stream between the Hub and node.
D0 = LSB of B data
D7 = MSB of B data
C = Control Bit or Reserved
P = Parity Bit

FIG. 17



Control Bits

RES: Reserved bit.

Status Bits

CAS: Cascade bit: Used to activate the port 1 cascade logic.

LA: Link Active: Indicates that the link is isochoronous active when set.

LPM: Low Power Mode: Indicates that the isophy is in low power mode when set.

CAP: CAPacity: Indicates the type of Isochronous capacity.
"1" 15.872 Mbps Isochronous bandwidth
"0" 6.144 Mbps Isochronous bandwidth

DIN T: D INTerrupt: Indicates that the isophy has received a start of D channel packet when set.

PIN T: M INTerrupt: Indicates that the isophy's maintenance has changed when set.

FIG. 18

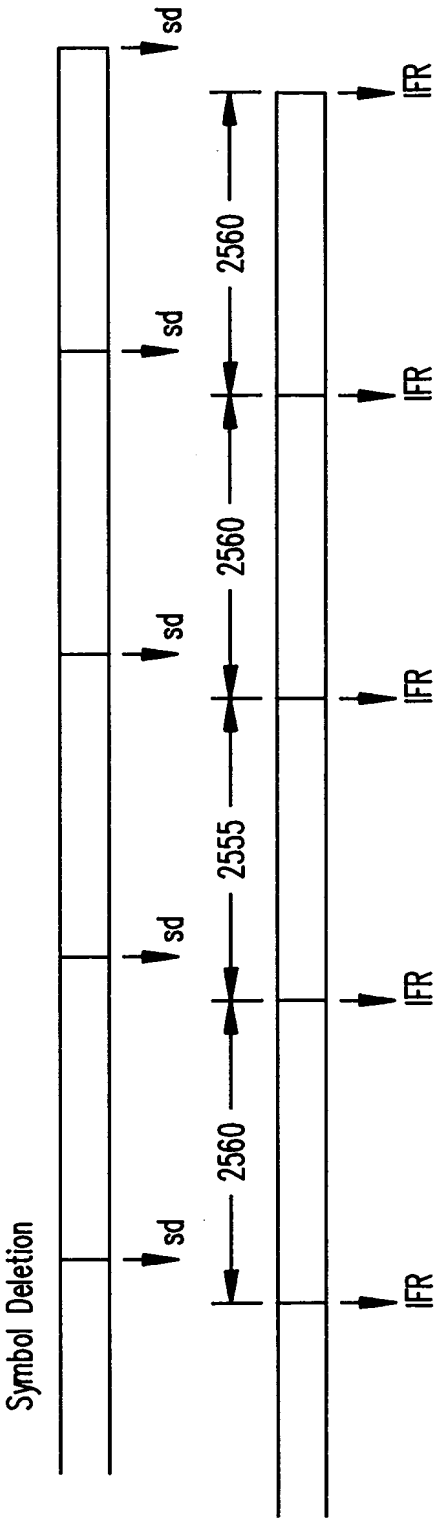


FIG. 19A

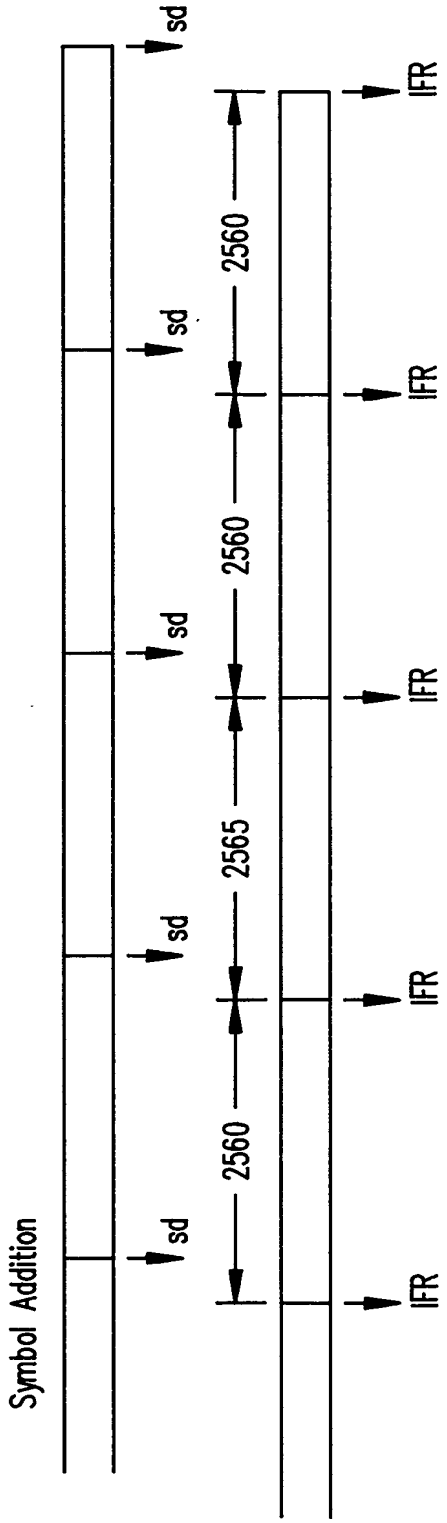


FIG. 19B

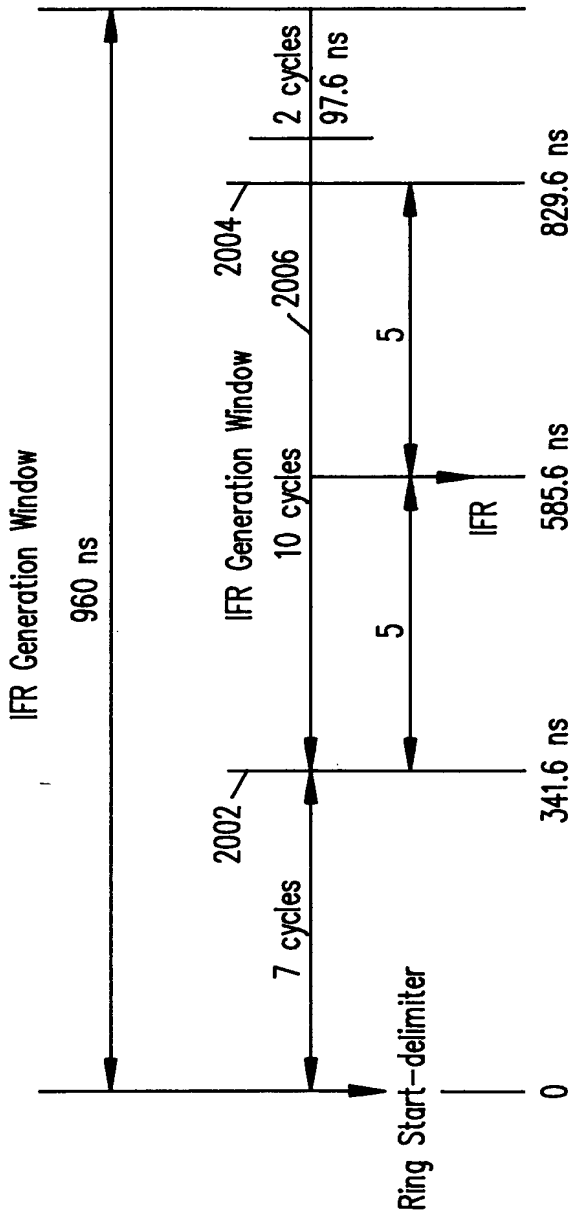


FIG. 20

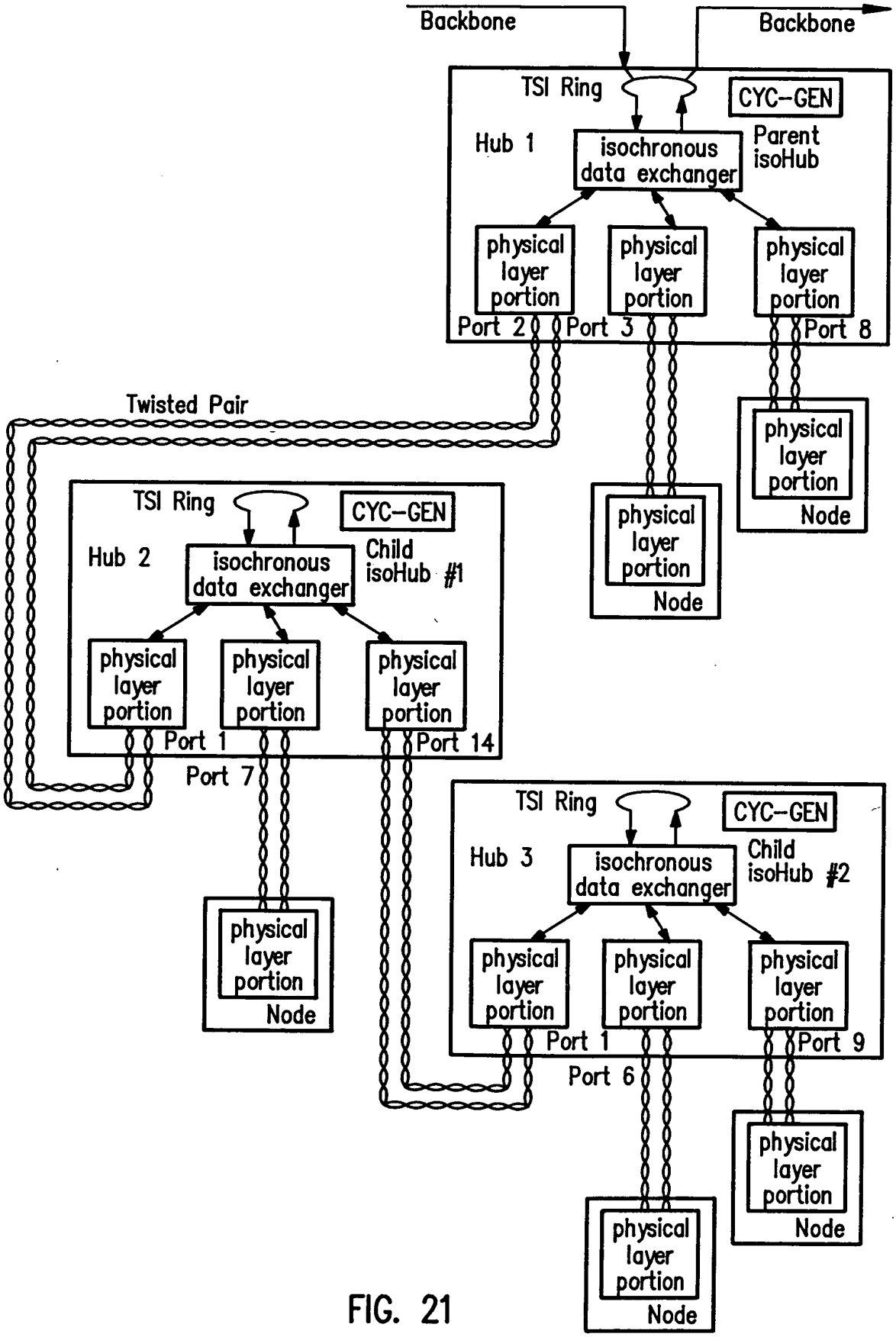


FIG. 21

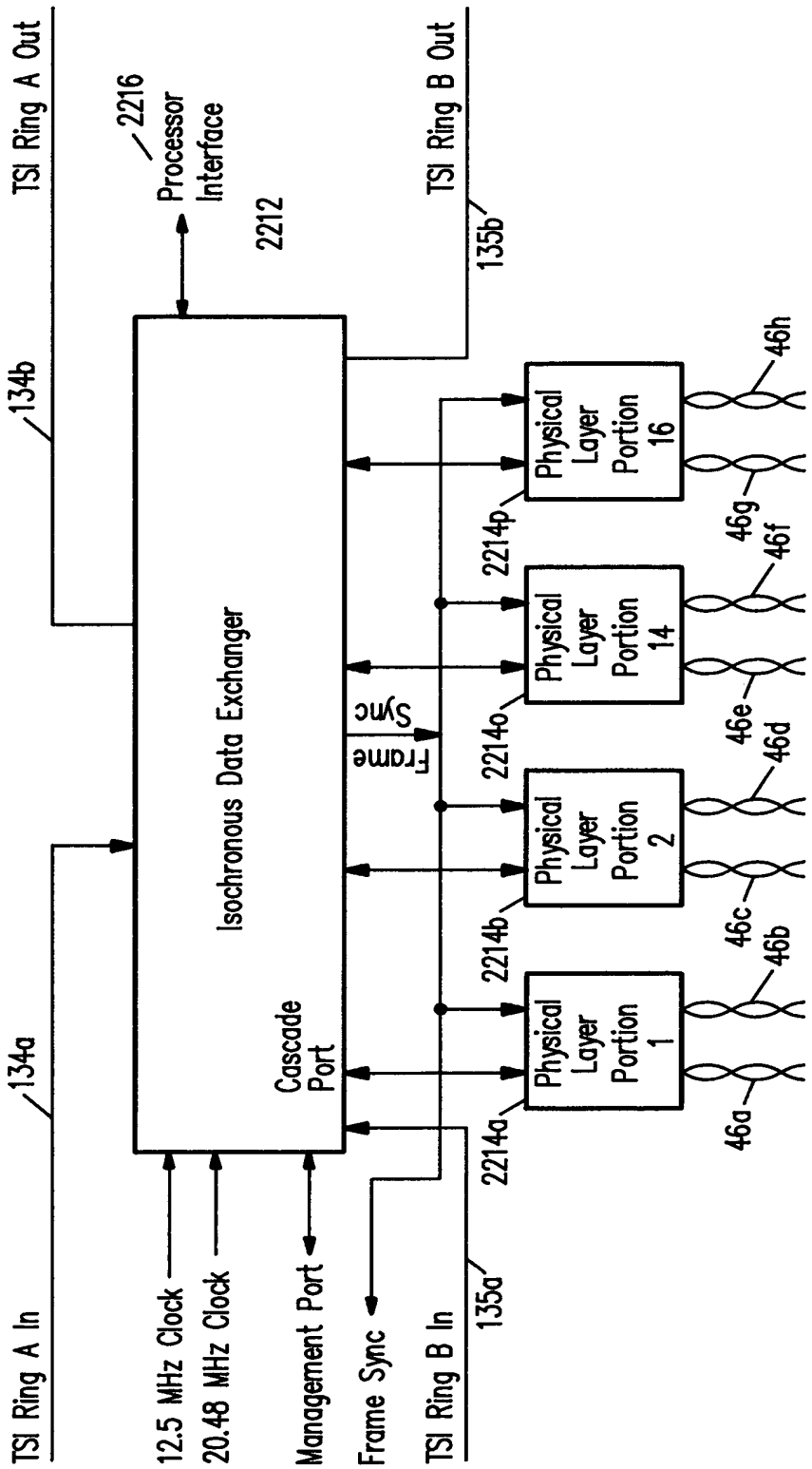


FIG. 22

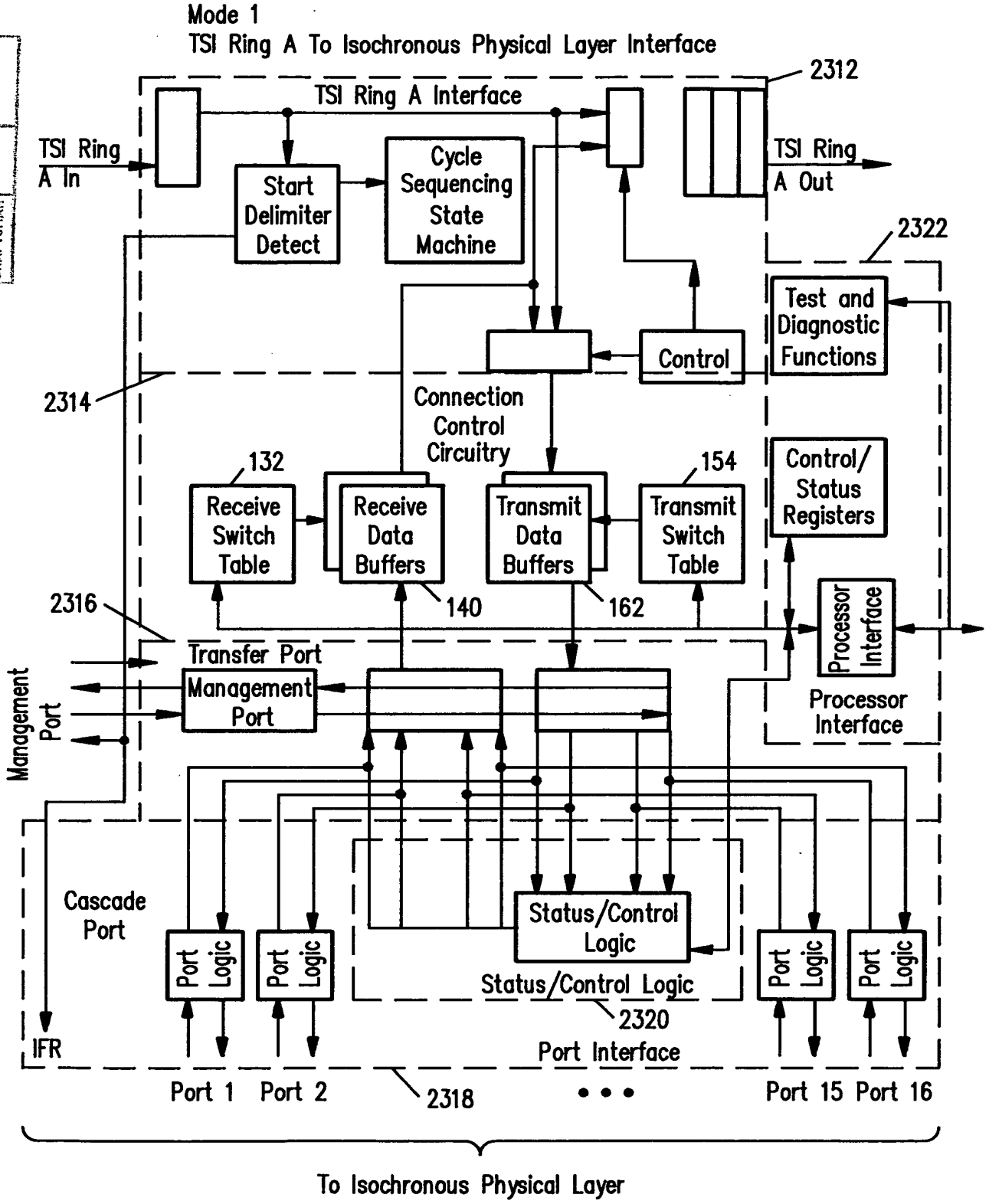


FIG. 23A

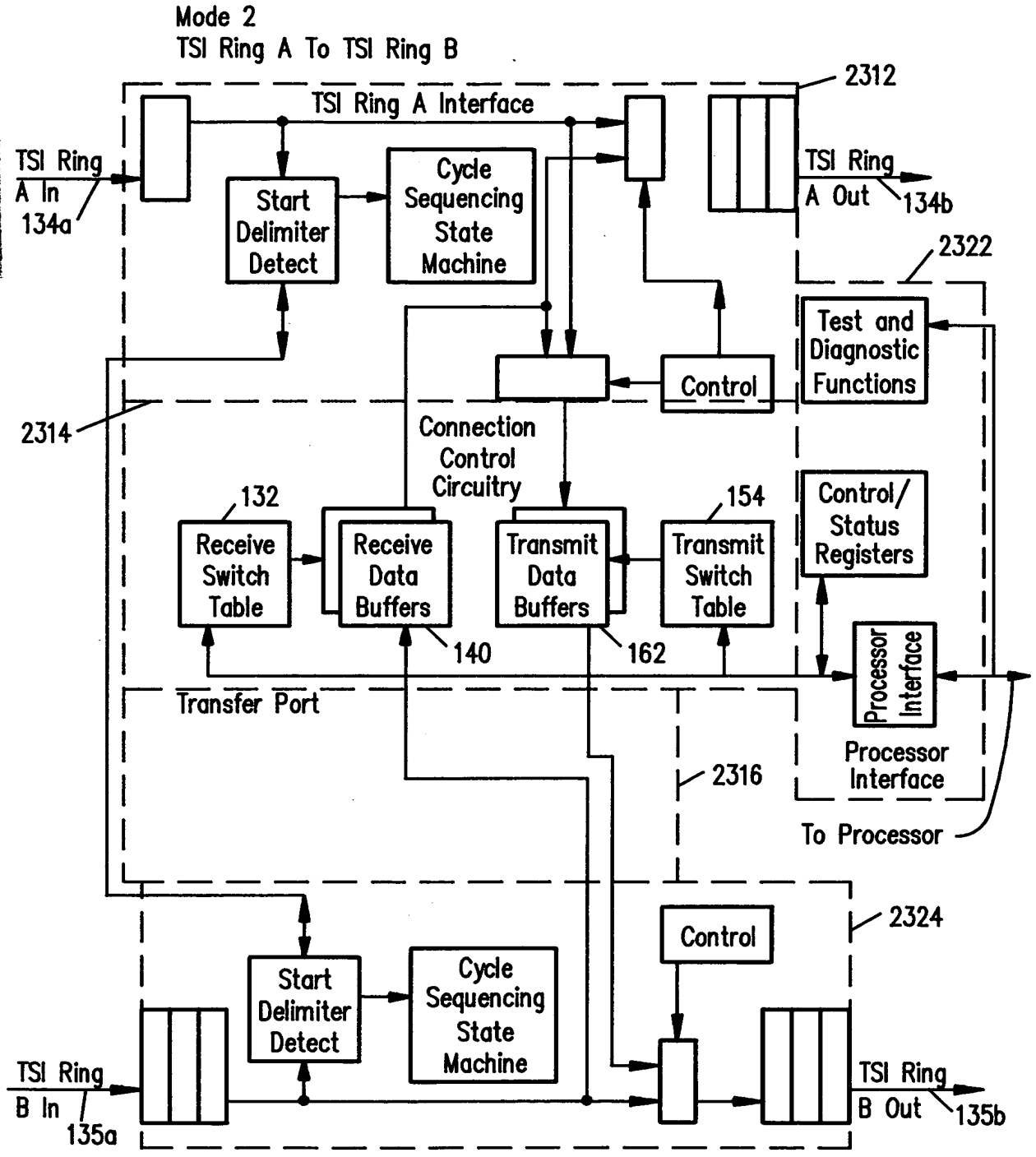


FIG. 23B

Switch Table Address

Receive Switch Table

		Parity	TSE	ITE	ETE	Data Buffer Address
Isochronous Maintenance Channel (IMC)	0					
TSI Ring A Slot 1	1					
TSI Ring A Slot 2	2					
• • •	• • •					• • •
TSI Ring A Slot 1535	1535					
TSI Ring A Slot 1536	1536					

MSB LSB

1 Bit 1 Bit 1 Bit 1 Bit ← 11 Bits →

FIG. 24A

Switch Table Address

Transmit Switch Table

		Parity	Not Used	IPE	IA	Data Buffer Address
Not Used	0					
Port 1, B channel 1	1					
Port 2, B channel 1	2					
• • •	• • •					• • •
Port 14, B channel 96	1535					
Port 2, B channel 96	1536					

MSB LSB

1 Bit 1 Bit 1 Bit 1 Bit ← 11 Bits →

FIG. 24B

Bit Definitions

IA: Idle Address: Indicates the idle pattern to be sent.

ITE: Internal Transmit Enable: Indicates on internal loopback of the slot when set.

IPE: Idle Pattern Enable: Indicates the use of a quiet pattern when set.

Switch Table Address

Receive Switch Table

Isochronous Maintenance Channel (IMC)	0	Parity	TSE	ITE	ETE	Data Buffer Address
TSI Ring A Slot 1	1					
TSI Ring A Slot 2	2					
• • •	• • •					• • •
TSI Ring A Slot 1535	1535					
TSI Ring A Slot 1536	1536					

MSB LSB

1 Bit 1 Bit 1 Bit 1 Bit ← 11 Bits →

FIG. 25A

Switch Table Address

Transmit Switch Table

Isochronous Maintenance Channel (IMC)	0	Parity	TSE	Not Used	ETE	Data Buffer Address
TSI Ring B Slot 1	1					
TSI Ring B Slot 2	2					
• • •	• • •					• • •
TSI Ring B Slot 1535	1535					
TSI Ring B Slot 1536	1536					

MSB LSB

1 Bit 1 Bit 1 Bit 1 Bit ← 11 Bits →

FIG. 25B

Bit Definitions

ETE: External Transmit Enable: In Mode 2, indicates an External switching of slot when set.

TSE: Tri-State Enable: The isoTSX drives the TSI ring output drivers when set.

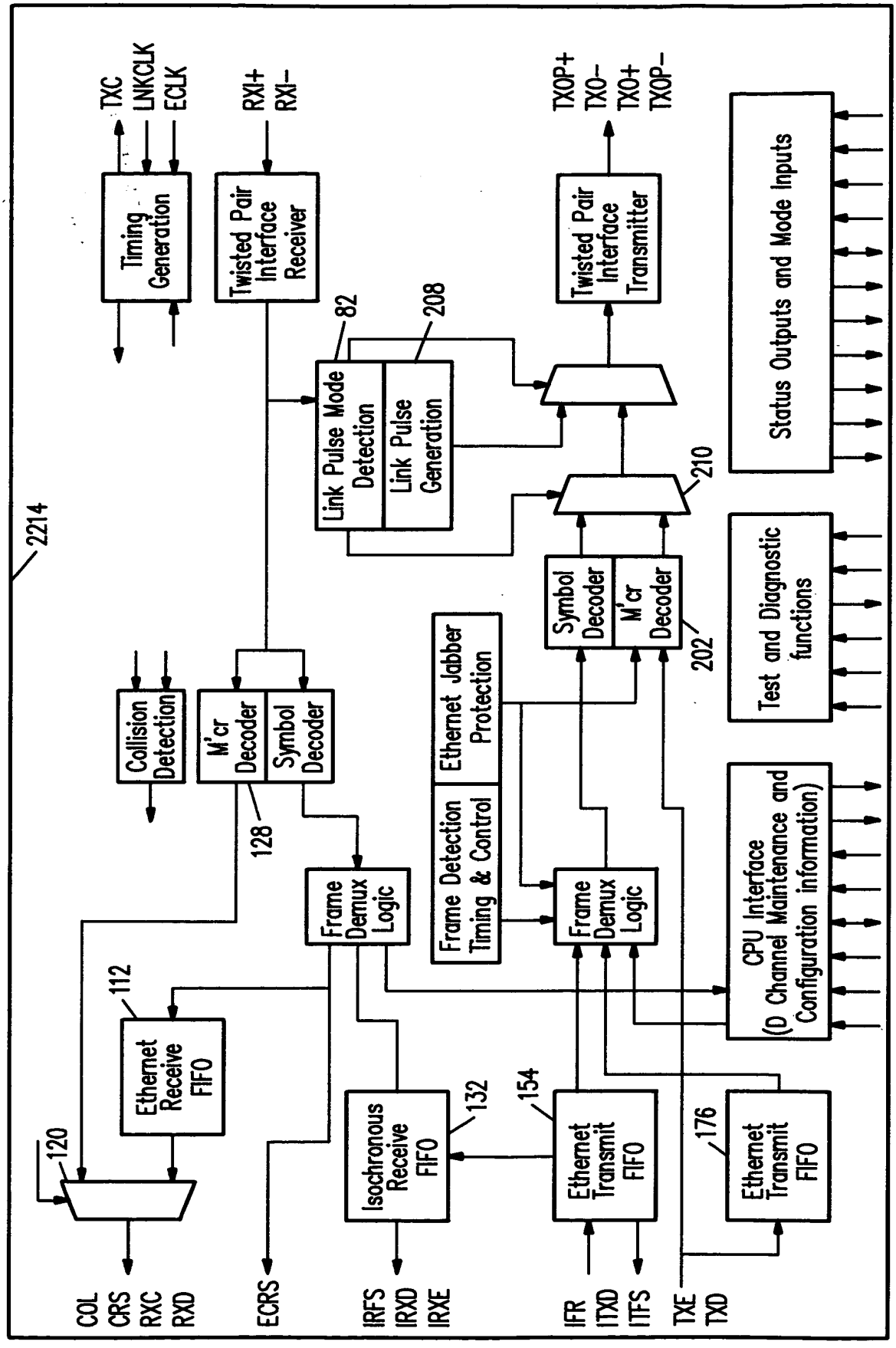


FIG. 26